UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,878	11/17/2003	Bruce A. Phillips	020366-090000US	5290

20350 7590 05/03/2006

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER	
SWERDLOW, DANIEL	
ART UNIT	**PAPER NUMBER**
2615	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,878	PHILLIPS ET AL.	
	Examiner	Art Unit	
	Daniel Swerdlow	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2006 and 25 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41 and 43-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41 and 43-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 April 2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 through 41 and 43 through 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Regarding Claim 1, the original specification fails to disclose an embodiment that converts one of a set of combined signals on an interface into two separate signals, each comprising digitally formatted video information in a distinct digital video format, and combines one of the separate signals with additional signal from a different interface and maps the combined signal and the signal comprising the digitally formatted video information in the

digital video format that was not combined with the additional signal onto separate interfaces for distribution.

5. Claims 2 through 14 and 43 through 45 incorporate the new matter of Claim 1 by dependence therefrom.

6. Claim 15 contains limitations similar to those of Claim 1 and, as such, incorporates the same new matter.

7. Claims 16 through 28 incorporate the new matter of Claim 15 by dependence therefrom.

8. Claim 29 contains limitations similar to those of Claim 1 and, as such, incorporates the same new matter.

9. Claims 30 through 41 incorporate the new matter of Claim 15 by dependence therefrom.

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1 through 41 and 43 through 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabenko et al. (WO 01/19005 A1) in view of Okawa et al. (US 2002/0129154 A1) and further in view of Bowen et al. (US Patent 6,580,710).

12. International application WO 01/19005 A1 is prior art to the instant application under 35 USC 102(b) based on its publication date of 15 March 2001. For convenience, in the rejections below examiner makes reference to column and line numbers in US Patent 6,819,682, the disclosure of which is identical. The only exception is the rejection of Claim 11, which is based on Fig. 1 of Appendix A of the published international application. While the appendices in the

published international application are in the prosecution record of the application for US Patent 6,819,682, they are not included in that patent publication.

13. Regarding Claim 1, Rabenko discloses a cable modem (Fig. 2, reference 2600; Fig. 3, reference 2300; column 4, lines 46-55) that corresponds to the network interface device claimed and comprises: an interface to an HFC network (Fig. 2, reference 1010; Fig. 3, reference 2060; column 3, lines 18-20) that corresponds to the external interface claimed and receives internet, television and telephone (i.e., a plurality of telecommunication services) (column 2, line 64-column 3, line 21) using Data Over Cable Service Interface Specifications (column 3, lines 47-52); interfaces to an HPNA network, a computer, a telephone and a television receiver (Fig. 2, reference 2015, 2012, 2014; column 3, lines 32-46) that correspond to the at least two distinct internal interfaces claimed and are connected to twisted pair wires, USB cable, telephone cord and coaxial cable that correspond to the internal transport media claimed; and a DOCSIS CPE controller (Fig. 3, reference 2313; column 6, lines 65-66) that corresponds to the processor claimed and receives combined signals from the HFC network interface that corresponds to the external interface claimed and separates and maps those signals to one of the interfaces to an HPNA network, a computer, a telephone and a television receiver that correspond to the internal interfaces claimed (column 3, lines 21-46), with the signals to the television receiver corresponding to the signals in the second digital video format claimed. Therefore, Rabenko anticipates all elements of Claim 1 except converting one of the combined signals into separate signals with a first and second digital video format, respectively, and a second external interface that receives an additional telecommunication service, the signal comprising which is combined

with the signal created by converting one of the separate signals to a first digital video format to create a combined signal that is mapped to an internal interface.

14. Okawa discloses an audio/video router (Fig. 3, reference 101) that converts video signals to an MPEG digital format that corresponds to the first digital video format claimed for transmission to PC's on a home local area network (0026-0029). Okawa further discloses that such an arrangement permits viewing of video content on PC's without the expense of a special network and special interfaces (0004-0006). It would have been obvious to one skilled in the art at the time of the invention to apply video format conversion as taught by Bowen to the cable modem taught by Rabenko for the purpose of realizing the aforesaid advantage. Bowen discloses a broadband communication interface (Fig. 3, reference 301; column 3, lines 41-49) that, in addition to a coaxial cable interface 304, has a twisted pair interface 303 that corresponds to the second external interface claimed and combines telephone signals that correspond to the additional telecommunication service claimed with data signals that correspond to one of the separate signals claimed to form an HPNA signal that corresponds to the combined signal claimed and is mapped to a phone line distribution interface that corresponds to the internal interface claimed (column 3, lines 50-62). Bowen further discloses that such an arrangement provides broadband services to customer premises without the expense and inconvenience of installing new network wiring (column 2, lines 24-34). It would have been obvious to one skilled in the art at the time of the invention to apply mapping of a combination of telephone services from one external interface and data services from another external interface onto an internal interface as taught by Bowen to the combination made obvious by Rabenko and Okawa for the purpose of realizing the aforesaid advantage.

15. Regarding Claim 2, Rabenko further discloses provision of 2-way services such as internet access and telephony via the DOCSIS CPE controller (column 3, lines 40-46).

16. Regarding Claim 3, Rabenko further discloses the interfaces to an HPNA network, a computer and a telephone (Fig. 2, reference 2015, 2012, 2014; column 3, lines 32-46) that correspond to the at least two distinct internal interfaces claimed receive internet and telephone signals (i.e., signals relating to telecommunication services) (column 2, line 64-column 3, line 21) from their respective media.

17. Regarding Claim 4, Rabenko further discloses provision of 2-way services such as internet access and telephony via the DOCSIS CPE controller (column 3, lines 40-46). As such, Rabenko discloses receiving separate signals from the respective media, and combining them onto the HFC network interface (Fig. 2, reference 1010; Fig. 3, reference 2060; column 3, lines 18-20) that corresponds to the external interface claimed using Data Over Cable Service Interface Specifications (column 3, lines 47-52).

18. Regarding Claim 5, Rabenko further discloses the DOCSIS CPE controller (Fig. 3, reference 2313) integrates signals from the telephone (Fig. 3, reference 2001) and the HPNA controller (Fig. 3, reference 2311) onto the HFC network interface (Fig. 2, reference 1010; Fig. 3, reference 2060; column 3, lines 18-20) that corresponds to the external interface claimed (i.e., into a combined information set).

19. Regarding Claim 6, Rabenko further discloses an internal interface to a TV set (i.e., coaxial cable) (Fig. 2, reference 2014; column 3, lines 44-46).

20. Regarding Claim 7, Rabenko further discloses an internal interface to an HPNA network (i.e., twisted pair cable) (Fig. 2, reference 2015; column 3, lines 32-34).

21. Regarding Claim 8, Rabenko further discloses an internal interface to an HPNA network (i.e., the twisted pair cable comprises existing telephone wiring) (Fig. 2, reference 2015; column 3, lines 32-34).

22. Regarding Claim 9, Rabenko further discloses use of Ethernet in place of the HPNA network (column 5, lines 46-51).

23. Regarding Claim 10, Rabenko further discloses provision of television, internet and telephone (i.e., video, data and voice) (column 2, line 64-column 3, line 21).

24. Regarding Claim 11, Rabenko further discloses provision of different services via different frequency ranges (Appendix A, Fig. 1).

25. Regarding Claim 12, Rabenko further discloses use of Ethernet and IEEE 802.11 (column 5, lines 46-54).

26. Regarding Claim 13, Rabenko further discloses an internal interface to an HPNA network (Fig. 2, reference 2015; column 3, lines 32-34).

27. Regarding Claim 14, Rabenko further discloses provision of service from a cable television network and a public telephone network (column 1, lines 57-64). It is not a patentable limitation on the interface device that the additional service is provided by a different business entity.

28. Claims 15 through 28 are essentially similar to Claims 1 through 14 and are rejected on the same grounds.

29. Claims 29 through 41 are essentially similar to Claims 1 through 13 and are rejected on the same grounds.

30. Regarding Claim 43, Bowen further discloses the interface that corresponds to the second external interface claimed is a twisted pair interface 303.

31. Regarding Claim 44, Bowen further discloses the telephone signal that corresponds to the additional signal claimed is a POTS (i.e., analog) signal (column 4, lines 18-20) and the data signal that corresponds to the separate signal claimed is a data-LAN (i.e., digital) signal (column 4, lines 26-31).

32. Regarding Claim 45, Bowen further discloses the telephone signal that corresponds to the additional signal claimed is an Ethernet (i.e., digital) signal (column 4, lines 54-56), the data signal that corresponds to the separate signal claimed is a data-LAN (i.e., digital) signal (column 4, lines 26-31) and the combined signal is a physical layer (i.e., analog) signal (column 4, lines 3-6).

Response to Arguments

33. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

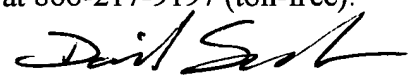
34. On page 12 of the response filed 6 April 2006, applicant appears to create an artificial distinction between a benefit of the combination and desirability of the combination. The strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. In re Sernaker, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Swerdlow
Primary Examiner
Art Unit 2615

ds
28 April 2006